## TRANSACTIONS

OF THE

# ENTOMOLOGICAL SOCIETY

oF

### LONDON

FOR THE YEAR 1889.

I. Monograph of the genera connecting Tinægeria, Wlk., with Eretmocera, Z. By The Right Hon. Lord Walsingham, M.A., F.R.S., F.L.S., &c.

[Read December 5th, 1888.]

PLATES I., II., III., IV., V., & VI.

The object of the present paper is to collect and arrange material for a study of certain genera of Micro-Lepidoptera, about the classification of which various opinions have already been expressed by different authors who have alluded to the subject.

The genera here presented for study are as follows:—

Tinægeria, Wlk. Snellenia, Wlsm. Pseudægeria, Wlsm. Œdematopoda, Z. Eretmocera, Z.

A careful and critical examination of their structure and affinities seems to disclose gradual modification, and to suggest that they are connected with each other by characters not jointly possessed by any other genera of those families or subfamilies in which they have hitherto been classed.

The species examined are those in the British Museum and in the Zeller collections, and especially a fine series of specimens in my own cabinet, for which I am indebted to Mr. G. T. Carter, Mr. F. J. Jackson, Mr. J. H. Leech, and Mr. H. Druce.

The question of classification has been touched upon under the various descriptions of species by Zeller, by Staudinger, by Walker, by Stainton, and by Meyrick; also at more length by Butler in a paper entitled "On the natural affinities of the lepidopterous family \*\mathbb{E}geriidae\" (Trans. Ent. Soc. Lond., 1878, pp. 121—5, Plate V.).

Zeller regarded Eretmocera (including Œdematopoda) as forming a connecting-link between that section of the unrestricted genus Œcophora, which included esperellum, Hb., seleniellum, Z., and chenopodiellum, Hb. (now associated with Butalis, Tr.), and the equally unrestricted genus Elachista, as represented by the species æratella, Z., modestella, Dp., &c. Staudinger, in describing his Staintonia medinella, states his opinion that it comes nearest to Butalis.

Walker, in the British Museum Catalogue, makes some very significant remarks. Of *Tinægeria* he writes, "this genus seems to connect the *Tineites* with the Ægeriidæ"; of Arauzona he writes, "this genus seems to connect the Ægeriidæ with the Gelechidæ." He, further places impactella in the genus Gelechia, and says "this species appears to have some affinity to the

Ægeriidæ."

Stainton remarks of his Atkinsonia, "a singular and beautiful genus belonging to the family Elachistida," and mentions its habit, when at rest, of erecting its hind legs above its back behind the head (as in Shreckensteinia and Heliodines, Stn.), and vibrating its plumed antenna. He also notes the larval habits (which are similar to those of many species of Butalis). Moreover, in his 'Tincina of Southern Europe,' he places Staintonia between Endrosis and Schreckensteinia, where it stands also in Staudinger and Wocke's Catalogue.

Meyrick classifies Castorura with the Elachistida, and Butler draws attention to the affinities with the Ægeriida

of Tinageria, Arauzona, and Acridura, and remarks that Acridura combines "the characters of the clear wings with those of the Purales and Gelechiida." He further states that, "A careful study of all the genera which seem to be allied to Acridura has manifested a gradation of structure from the Ægeriidæ to the Pyrales, on the one hand, and from the Ægeriidæ to the Gelechiidæ on the other." He goes on to say:—"The difficulty of pointing out the resemblance of the Ageriida to the Gelechiida is nothing to that of determining where the line of demarcation between the two families is to be drawn: thus Tinægeria is apparently a small form of Egeriid with long, slender-curved palpi, and a hairy second joint to its antennæ; it is without doubt allied to Arauzona and to Acridura, less nearly to Tinthia, which is close to Ægeria; on the other hand, the Gelechiid genus Exodomorpha (Staintonia, Staud.) is evidently the African representative of the New World genus Tinægeria; indeed, I have hitherto only found one structural character to distinguish them by, namely, the form of the secondaries; yet Exodomorpha chiefly differs from Gelechia in the hairy second joint to its antennæ, and the non-indented apex of its posterior wings."

Thus it will be seen that in the case of Eretmocera (shown in this paper to represent Exodomorpha, Staintonia, and Castorura), Zeller, Staudinger, Stainton, and Meyrick recognise its affinity to the Elachistida; while Walker and Butler agree with each other in referring it to the Gelechiida, and in pointing out its connection with the Egeriida, with which Butler also

connects the Pyrales.

It should be borne in mind that the family regarded by Walker as *Gelechiidæ* included the genus *Butalis*, since referred to the *Elachistidæ*. Thus Walker's opinion was not at variance with those of Zeller, Staudinger,

Stainton, and Meyrick.

Mr. Butler can scarcely have intended to include Butalis, or any other genus of the now generally recognised Elachistidæ in the term Gelechiidæ, for he expressly mentions the indented hind wings of that family, a character not exhibited by Butalis or its allies.

In the case of *Œdematopoda* (shown here to equal *Atkinsonia*), Zeller and Stainton also agree in referring

it to the neighbourhood of Butalis or the Elachistida: and in the case of Tinægeria, Walker and Butler again agree that the genus seems to connect the Ægeriidæ with certain families of the Tineites. Felder and Rogenhofer place the type of the genus with a "?" in Eretmocera, and a specimen in my own collection, received from Mr. G. F. Mathew, was named by Mr. Meyrick before I received it, "Atkinsonia lineata, Walk.," showing that all these authorities concur in classing Tinægeria with the Tineites (Tineina, Stn.).

I am unable to regard the genus Acridura as allied to any of the genera here mentioned; its long, slender, and pointed abdomen, its Pyralidiform wings and neuration, and certainly its general appearance, seem to separate it very widely from Tinægeria at the one end, as well as from Edematopoda and Eretmocera at the

other end of our proposed series.

The more important structural characters of the genera

included in this paper are as follows:—

1. Antennæ thickly clothed with more or less long projecting scales, extending to a greater or less distance along them.

2. A greater or less tendency to transparency in the

hind wings.

3. Legs often more or less clothed with projecting scales upon or above the strong spurs.

4. Bodies usually flattened, frequently brightly

coloured, and with strong lateral scales.

4. Fore wings narrow, elongate, the costal and dorsal margins nearly straight, and parallel to beyond the

middle; the apex depressed.

If any affinity to the *Ægeriidæ* can be supposed to exist in this group of genera, the species having transparent hind wings may be regarded as in this respect showing less departure from the characters of that family than others with opaque hind wings. For this reason, as a matter of convenience in classification rather than as an arbitrary assertion of a supposed physiological fact, however probable, I have here ranged the genera according to their degree of approach in structure and appearance to the "*Ægeriidæ*." They seem to present a gradual and well-marked departure from the typical form of that family by modifications traceable step by step throughout the series, but it should be

observed that they all differ from them in their longer

recurved palpi.

First, it should be remarked that the structure of the antennæ is approximately uniform throughout the series here noticed; the variation occurs in the nature and amount of scale-clothing only. Butler's observations as to the long hairy second joint in the antennæ of Tinægeria and Exodomorpha are incorrect, inasmuch as not the second joint only, but the whole basal portion of the antennæ to near or beyond the middle, consisting of from thirty to forty joints, is thickly clothed, more densely in the female than in the male, no one joint being noticeably longer than the others.

The amount of transparency in the hind wings is most noticeable in *Tinægeria*, gradually diminishing in *Snellenia*, confined to the extreme abdominal angle in *Œdematopoda*, and barely traceable in *Eretmocera*.

The scaling of the legs and spurs reaches its highest development in Snellenia latipes, originally placed by Walker in Tinægeria: it is also very noticeable in Œdematopoda; the spurs of Œ. clerodendronella are so thickly clothed as to have been taken for tufts of scales by Stainton when describing the species. This character almost disappears in Eretmocera, but the spurs are welldeveloped, and the structure of the legs sufficiently resembles those of Edematopoda to point to the conclusion that its habit of elevating them above the body may be the same as described in the case of clerodendro-The flattened structure of the abdomen is approximately uniform throughout the genera. lateral scaling is traceable in *Tinægeria*, somewhat more developed in Edematopoda and Snellenia, and strongest in Eretmocera; the anal tuft is always well-developed.

We now come to the shape and neuration of the wings, a character in which a gradual change is also noticeable. The narrow elongate fore wings are present throughout the group, but the neuration differs perceptibly, and the form of the hind wings is not entirely consistent; Tinægeria, as here limited, standing somewhat apart from the other genera, except Pseudægeria, in having the abdominal margin of the hind wing bulged towards the middle, giving the wing a wider appearance, and agreeing in this respect with the genus Dasycera, which also possesses the narrow fore wings, clothed antennæ, and slender recurved palpi characteristic of this genus. I

should be inclined to admit that some natural affinity may exist between them, but I doubt if it can be held to break the chain connecting *Tinægeria* with *Eretmocera*, nor do I think it forms a true link in that connection.

The hind wings of Snellenia, in which I have included S. latipes, originally placed by Walker in his genus Tinægeria, are narrow, with the margins nearly parallel, and the apex rounded. In Edematopoda and Eretmocera the hind wings are pointed, but the neuration shows gradual progression from the one to the other. Tinægeria, Snellenia, and Pseudægeria the discal cell in both fore and hind wings is somewhat square at the outer extremity. In Edematoroda it is square in the fore wings and pointed in the hind wings, and in Eretmocera it is pointed in both fore and hind wings. The apical vein of the fore wings is forked throughout. An additional link in the chain of connection appears in the labial palpi; these, in Edematopoda, are very slender and strongly recurved, in this respect nearly approaching Tinageria, whereas, in the form of the hind wings, it appears to be more nearly allied to Eretmocera, of which Zeller regarded it as a subgenus.

It is unfortunate that so far little or nothing is known of the larval habits of these insects. Stainton describes the larva of Œ. clerodendronella as feeding in webs on shoots of Clerodendron. E. medinella is only known to frequent the flowers of *Umbelliferæ* in Spain (teste Stdgr.) and Senecio in Persia (teste Christoph.); and Mr. G. T. Carter, who has watched the habits of three or four species of Eretmocera flying in October at Bathurst, and at Accra in West Africa, although he has at present failed to discover their larvæ, has supplied me with a sketch of the plant which they habitually frequent, somewhat resembling Clerodendron, and possibly referable to one of the African species of Verbenacea. The flowers of these shrubs, like the hind wings of many species of Eretmocera, are often scarlet or crimson, and they flower about the time of year at which the specimens were taken.

It is certainly worthy of a passing notice that the geographical distribution of the genus Clerodendron coincides somewhat remarkably with what is known of the distribution of the genera mentioned here; but it would be obviously unsafe to found any argument in favour of their affinity to each other on such slender grounds. The parallel may be a mere coincidence.

Навітат.		Clerodendron
Africa		marianidas (Tran Afu)
Airica	(Eretmocera derogatella, Wlk.	myrocoides (Trop. Afr.)
1	,, fuscipennis, Z.	•
S. Africa	;, lætissima, Z.	
S. Airica	,, lunifera, Z. ,, miniata, Wlsm.	
	,, scatospila, Z.	
	Edematopoda princeps, Z.	
4.V S .	(Eretmocera basistrigata, Wlsm.	
W. Africa	,, carteri, Wlsm.	scandens.
W. Airica	,, Jascipenius, Z.	thompsonæ.
	,, scatospila, Z.	
E. Africa	( ,, derogatella, Wlk.	
(Zanzibar)	dorsistrigata, Wlsm.	macrosiphon.
(2022220	,, miniata, Wlsm.	
Mauritius		(hæterophyllum.
		\ligustrinum.
Europe	,, medinella, Stgr.	
Persia and	,, medinella, Stgr.	
Turkestan 5	,,	(fætidum.
China		fragrans.
China		seratinum.
		(squamatum.
Japan	(Edematopoda ignipicta, Btl., leechii, Wlsm.	trichotomum.
		fortunatum.
	clerodendronella,Stn.	hastatum.
	Larva drawing together terminal leaves of Clerodendron with	infortunatum.
India	a white web.	macrophyllum.
	Eretmocera impactella, Wlk.	nutans (Sylhet).
	Snellenia coccinea, Wlsm. , tarsella, Wlsm.	phlomoides. siphonanthus.
4	,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	viscosum.
Ceylon	Eretmocera impactella, Wlk.	infortunatum.
Singapore	,, impactella, Wlk.	
.sBarboro	,,	(fallax.
Java		aniculatum.
		\\rumphianum.
Borneo	Snellenia bimaculata, Wlsm.	bethuneanum.
Celebes		(illustre. \minahassæ.
	/ lineate Will-	(menunasic.
Australia	Eretmocera chrysias, Meyr.	∫tomentosum.
riastiana	Pseudægeria squamicornis, F. & R.	$\costatum.$
Fiji	,, squamicornis, F. & R.	
		A few species chiefly na-
	(Tinægeria basalis, Wlk.	tives of W. Indies and
	,, fasciata, Wlk.	Columbia.
S. America	ochracea Wlk	One species broadly dif- fused over the mari-
	Snellenia flavipennis, F. & R.	time regions of Tropi-
	;, ochracea, Wlk. Snellenia flavipennis, F. & R. ,, latipes, Wlk.	cal America [Petræa
	39.	\ volubilis, Vera Cruz.

It remains to refer to two species which have been placed by their authors in one of the genera here monographed, but which I have ventured to exclude:—

1. ? Staintonia fulgens, Erschoff, Hor. Soc. Ent. Ross., XII., 347, 1876.

The description is wholly inadequate to connect it with the genus Eretmocera, or with the group of genera to which it belongs; indeed, its shorter palpi and broader hind wings serve at once to distinguish it from them. It probably agrees with the genus Lepidotarphius, Pryer.

2. Staintonia? apiciguttella, Christoph., Bull. Soc. Imp. Nat. Mosc., LVII., 42-3 (1882) = Butalis sinensis, F. & R., pl. cxl., fig. 11, 1875 (n. syn.).

Of this species I have specimens in my own collection; it is almost certainly a true *Butalis*.

The changes here suggested in the generic position of certain species, and in the synonymy of the genera,

require a few words of explanation.

Tinægeria has been restricted to species of which the antennæ are thickly clothed on the basal half only; these have the hind wings rather widened and almost entirely transparent. Snellenia latipes, originally placed in Tinægeria by Walker, differs from his type, T. ochracea, in its antennæ being clothed nearly to the ends, in its narrower hind wings with nearly parallel margins, and in the strongly-scaled spurs of the hind legs. For these reasons it has been transferred to the new genus Snellenia, with which it more nearly agrees. It is possible that at some future time, when more material may become available, it may be convenient to form a new genus for its reception.

Snellenia lineata, also placed by Walker in Tinægeria, agrees very closely in structure with S. coccinea, the type of Snellenia, but differs in its longer and more slender palpi; it differs from Tinægeria ochracea in the same particulars as S. latipes, with the exception of the

strongly-scaled spurs.

After examining, in all details, the structure of Arauzona basalis, Walker, I am unable to discover any

sufficient grounds for separating this species from the

genus Tinægeria.

Œdematopoda, Zeller, possesses all the structural characters relied upon by Stainton in defining his genus Atkinsonia; the strong scaling of the spurs occurs again in this genus, and in this character, as in the long elevated fringe of the antenne, it is merely a question of degree as between Zeller's and Stainton's types. Eretmocera ignipicta, Butler, agrees entirely with Œdematopoda, and is separable from the true Eretmocera by the shape of the discal cell in the fore wings, as well as by the characters mentioned above, which do not occur in that genus.

In Trans. Ent. Soc. Lond., 1881, p. 271, I have already pointed out that *Staintonia* and *Exodomorpha* can only be regarded as synonyms of *Eretmocera*; to these must now be added *Castorura*, Meyrick. Without committing Mr. Meyrick to any approval of the classification suggested in this paper, so far as regards the affinities of the different genera, I may mention that he quite concurs in regarding *Castorura* as identical with

Eretmocera.

Felder and Rogenhofer figure, in the 'Reise Novara,' the following species under the name "Eretmocera?":

—E. æneiceps, which is obviously Tinægeria ochracea;

E. sesioides, which is certainly Snellenia lineata; and

E. flavipennis, the figure of which differs from that of sesioides only in its more yellow colour, in the dark veining of the anterior wings being interrupted by a pale space across the middle, and in the colour of the abdomen, which in sesioides is figured of a uniform dark tinge, and in flavipennis is yellow, with the apex only of a darker colour.

The figures are not satisfactory but they indicate these points of difference with sufficient clearness; and in the letterpress the locality for flavipennis is "Amer.?," of sesioides, "Sidney." Snellenia lineata = sesioides is from Sydney, Australia, and is so labelled in the British Museum, as in my own collection; but, in describing the species, Walker states that his specimens were from "Para, Bates' coll." This, although evidently an error as regards the actual specimens now existing, seems to increase the suspicion, founded upon Felder's "Amer.?," that a somewhat similar species does occur on the

American continent. If Felder's species was truly American, it was probably obtained by Lindig from Bogota, approximately in the same region where Bates collected.

Walker's description seems to apply to the insect figured by Felder as Eretmocera? sesioides, and it is probable that two of the specimens in the British Museum are rightly regarded as his types of lineata. These two are distinctly and separately labelled "Sidney," and as the other two specimens, to which Walker's manuscript name Pegella ægeriella is attached, are also both labelled "Australia," it seems impossible to account for his error in stating that his types were collected by Bates at Para.

This paper contains descriptions of two new genera and eight new species, and as it is intended as a monograph, so far as it goes, the descriptions of the known species are proposed to be republished, with such notes and additions as may serve to facilitate their recognition.

# TINÆGERIA, Wlk. = ARAUZONA, Wlk. Type. Tinægeria ochracea, Wlk.

Antennæ thickly clothed with long scales to half their length, thence simple. Labial palpi recurved, ascending, very long and slender; 2nd joint about equal in length to the apical joint, and slightly straighter. Maxillary palpi small, drooping. Haustellum long, scaled at base. Ocelli present. Head and thorax smooth. Fore wings elongate, the margins nearly parallel, rounded at apex; neuration, 12 veins, 7 and 8 from a common stem. Hind wings partially transparent, widened in the middle, tapering towards the base and apex, costal margin somewhat depressed beyond the middle, apex rounded, dorsal margin evenly rounded; neuration, 8 veins, 6 and 7 parallel, 3 and 4 separate at the base, 3 from, or near, angle of cell. Abdomen brightly coloured, not fringed at the edges. Legs with long spurs not tufted at the joints. [Wlsm.]

# Tinægeria, Wlk., Cat. Lp. Ins. B. M., VIII., 260 (1856). Type. Tinægeria ochracea, Wlk.

"Corpus gracile. Proboscis brevissima.\* Palpi graciles, arcuati, ascendentes, thorace non breviores. Antennæ setaceæ, graciles,

<sup>\*?</sup> fracta.-Wlsm.

subpilosæ, corpore fere longiores. Abdomen lineare, gracile, apice non fasciculatum. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ perangustæ; posticæ limpidæ.

"Body slender. Proboscis very short." Palpi slender, curved, ascending, as long as the thorax; third joint very slender. Antennæ setaceous, slender, slightly pilose, full as long as the body. Abdomen linear, sessile, not tufted at the tip. Legs slender; hind tibiæ with four long spurs. Wings very narrow. Hind wings mostly limpid.

"This genus seems to connect the Tineites with the Egeriide."

# = Arauzona, Wlk., Cat. Lp. Ins. B. M., XXXI., 25—6 (1864), (n. syn.).

Type. Arauzona basalis, Wlk.

"Mas.† Corpus gracile, sublineare. Proboscis longa, valida. Antennæ alis anticis paullo longiores, fimbria brevi densa munitæ, apices versus glabræ. Abdomen alas posticas longissime superans. Pedes læves, breves, robusti; tibiæ posticæ subincrassatæ, calcaribus duobus apicalibus validis. Alæ anticæ angustæ, vestitæ; posticæ vitreæ.

"Male.† Body slender, nearly linear. Proboscis long, stout. Antennæ a little longer than the fore wings, with a thick short fringe along nearly two-thirds of the length from the base. Abdomen extending for nearly its whole length beyond the hind wings. Legs short, stout, smooth; hind tibiæ slightly incrassated, with two long stout apical spurs. Wings narrow. Fore wings opaque, rounded at the tip. Hind wings vitreous.

"This genus seems to connect the Ægeriidæ with the Gelechidæ."

## [Pl. i.]

# 3 9, ochracea, Wlk., Cat. Lp. Ins. B. M., VIII., 260 (1856).

"Ochracea, subtus argentea; caput nigro-cyaneum; antennæ nigræ, apices versus albæ; thoracis disco et abdominis apice nigrum; alæ anticæ nigræ, basi fasciaque subapicali ochraceis; posticæ limpidæ, apud costam ochraceus, apice nigricantes.

"Ochraceous, silvery beneath. Head dark blue. Disc of the thorax and tip of the abdomen black. Fore wings black, ochra-

<sup>\*?</sup> broken.—Wlsm.

<sup>[†</sup> The palpi are missing from the type, and the specimen is unquestionably a female.—Wlsm.]

ceous towards the base, and with an ochraceous subapical band. Length of the body,  $2\frac{1}{2}$  lines; of the wings, 5 lines.

"a. b. Para; from Mr. Bates' collection."

[This species is identical with Eretmocera? aneiceps, F. & R., from Bogota.—Wlsm.]

Antennæ yellow at the base, thence thickly clothed with dark purplish-fuscous scales to half their length, thence broadly banded with white; apical one-third purplish fuscous. Labial palpi recurved, long, slender, 2nd joint about equal in length to the apical joint and slightly straighter; purplish at the extreme base of the 2nd joint, the remainder of which is bright golden yellow externally, whitish internally, the apex of the 2nd joint and the apical joint tinged with fuscous. Maxillary palpi black. Head smooth, metallic-purplish; face lilac. Thorax shining purplish fuscous, with two golden yellow lines slightly converging pos-Fore wings purplish fuscous, sprinkled with golden vellow scales, especially along the middle of the wing; at the base is a golden yellow band overspread at the extreme base of the costa with purple; at the outer one-fourth of the wing is an illdefined golden vellow fascia, divided transversely by four or five narrow lines of the dark ground colour, but extending inwards at the middle and along the extreme costal margin; the cilia at the anal angle are slightly ochreous; the whole apex of the wing and the remainder of the cilia purplish fuscous. Hind wings transparent, except a broad band along the costal margin, which is pale straw-yellow, the veins immediately below it being marked with bright golden yellow, which also extends narrowly around the abdominal margin for one-third of the wing-length; below the apex the veins and cilia are smoky fuscous, with green and lilac iridescence upon the transparent wing-surface below them. Under side of fore and hind wings yellow along the basal half of the costal area, paler below and smoky fuscous beyond. Abdomen vermilion, with a broad black band at the anal extremity, and a greyish anal tuft. Under side yellowish. Legs: the upper side of the upper half of the tibiæ are tinged with vermilion on golden yellow; spurs and under side pale straw-yellow; tarsal joints broadly banded above with dark fuscous. Exp. al. 13 mm.

Imago.—October.

Hab. Bogota (Lindig), Santarem (Mr. J. H. Leech).

The above description is taken from a male in my collection. The specimen figured on pl. exxxviii. of the

'Novara Reise' is a female. Walker's types in B. M. are male and female (Wlsm.).

## [Pl. vi., fig. 1.]

3, fasciata, Wlk., Cat. Lp. Ins. B. M., VIII., 261 (1856).

"Nigræ; pectus albideum; abdomen ochraceum, basi et apice nigrum; pedes ochracei, nigro fasciati; alæ posticæ sublimpidæ, nigro marginatæ, apud costam testaceæ.

"Black. Pectus whitish. Abdomen ochraceous, black at the base and towards the tip. Hind wings nearly limpid, bordered with black, testaceous along the costa. Length of the body,  $2\frac{1}{2}$  lines; of the wings, 5 lines (= 11 mm.).

"a. Para. From Mr. Bates' collection." [Walker's type in B. M. is a male.—Wlsm.]

## [Pl. vi., fig. 2.]

2, basalis, Wlk., Cat. Lp. Ins. B. M., XXXI., 26 (1864).

"Mas.\* Nigro-cuprea; antennæ fascia lata alba; thorax ochraceo-bivittatus; pectus et abdomen subtus alba; tibiæ posticæ ochraceo-fasciatæ; alæ anticæ striga basali ochracea; posticæ vitreæ, venis fimbriaque nigris.

"Male.\* Blackish cupreous. Antennæ with a broad white band above on the basal half of the slender part. Thorax with an ochraceous stripe on each side. Pectus white. Abdomen white beneath. Hind tibiæ with an ochraceous band. Fore wings with a short ochraceous basal streak. Hind wings vitreous, colourless; veins and fringe black, the latter rather long. Length of the body,  $3\frac{1}{2}$  lines; of the wings, 8 lines (= 17 mm.).

"a. Ega. From Mr. Bates' collection."

## Snellenia, n. g.

Type, &. Snellenia coccinea, Wlsm.

Antennæ supra dense squamatæ. Palpi ascendentes, recurvi, articulo apicali tenui, acuminato. Haustellum vestitum. Caput et thorax læves. Alæ anticæ anguste elongatæ, apice obtuso, depresso, costa ultra medium aliquot arcuata; venæ duodecim, septimo et octavo a pedicillo communi, ceteris singulis. Alæ posticæ prope basim subhyalinæ, apice rotundato, anguli abdominali distincto, marginibus costali et dorsali subparallelibus; venæ octavo, tertio et quarto a pedicillo communi. Abdomen planum,

<sup>[\*</sup> This is an error; the specimen is a female.—Wlsm.]

fasciculis lateralibus et fasciculo anali conspicuis. Pedes supra calcaria fasciculati.

Antennæ thickly fringed on the upper side, the fringes tapering to the apex. Labial palpi ascending, 2nd joint recurved, clothed with coarse scales; apical joint naked, slender, acuminate. Maxillary palpi very short. Haustellum thickly clothed. Ocelli present. Head and thorax smooth. Fore wings narrow, elongate, rounded at apex; costa arched beyond the middle, depressed before it; neuration, 12 veins, 2 and 3 arising from near angle of cell, 7 and 8 from a common stem. Hind wings semitransparent at base, rounded at apex, abdominal angle well-developed, costal and dorsal margins almost parallel; neuration, 8 veins, end of cell somewhat square, 3 and 4 from a common stem. Abdomen flattened, slightly tufted at sides, anal tuft broad and well-developed. Legs tufted at base of spurs, but not to the same extent as in Atkinsonia.

This genus differs from Atkinsonia, Stn., in the greater width of the hind wings, and appears to be more nearly allied to Tinageria, Wlk., and Arauzona, Wlk., in this respect, partaking of the characters of Dasycera, Hw., and its allies, on the one side, and of Stathmopoda, Stn., Schreckensteinia, Hb., &c., on the other. Comparing it with undoubtedly allied genera mentioned in this paper, it seems to form a connecting-link between the so-called Gelechida and the Elachistida. I entirely agree with the opinion expressed by Mr. E. Meyrick, in a letter to me on this subject, that Snellenia lineata, Wlk., from New South Wales, which he regarded as probably allied to Atkinsonia, is nearly related to Dasycera; but the true Atkinsonia from India seems to form a distinct connecting-link between this and the African forms described by Zeller under the genera Œdematopoda and Eretmocera, which undoubtedly approach Butalis, Tr.

Tabulation of the species comprised in the genus Snellenia:—

- A. Neuration of fore wings more or less outlined with dark scales.
  - a. Fore wings orange-yellow.
    - 1. = lineata, Wlk. 2. = flavipennis, F. & R.
  - b. Fore wings red.
    - 1. Tarsi with white rings = tarsella, Wlsm.
    - 2. Tarsi without white rings = coccinea. Wlsm.

### B. Fore wing spotted or fasciate.

- a. Abdomen red, with dark bar and anal segment = latipes, Wlk.
- b. Abdomen yellow, with two dark bands = bimaculata, Wlsm.

## [Pl. ii.]

### coccinea, n. s.

Alæ anticæ cocciniæ, strigula discali post medium furcata nitide violaceo-fusca; ciliis nigrescentibus. Alæ posticæ nigræ, costa ex basi ultra medium anguste miniata. Capite, antennis, palpis, thorace, abdomine et tibiis nigris.

Antennæ black. Palpi black; the basal joint and inner side of lower part of 2nd joint greyish. Head and thorax black, the latter somewhat iridescent. Fore wings bright scarlet; a small spot at the base of the costa and a more elongate small space at the base of the dorsal margin black; a violaceous-fuscous metallic streak at the end of the cell, about equidistant between the costal and dorsal margins, is bifurcate outwards, and below this a few black scales are traceable along the lines of the veins which run to the lower half of the apical margin; cilia blackish. Hind wings and cilia black, the costal margin from the base to beyond the middle rosy pink. Under side of fore and hind wings bright red, the apical margin and outer half of fore wings, except the costal portion, obliquely suffused with fuscous, the hind wings with a broad fuscous border extending from the base to the apex around the abdominal and apical margins. Abdomen and legs black. Exp. al. 15 mm.

Hab. Sikkim.

A single specimen, for which I am indebted to the kindness of Mynheer P. C. T. Snellen, was collected by Mr. H. J. Elwes.

Type, &, Mus. Wlsm.

# [Pl. vi., fig. 3.]

### tarsella, n. s.

Capite nigro. Antennis nigris ultra medium late squamatis. [Palpi et abdomen desunt.] Thorace coccineo. Alis anticis coccineis, nigro venatis, margine dorsali sub plica nigrescenti. Alis posticis dilutioribus, nigro marginatis. Tibiis nigris, tarsis albo annulatis, calcaribus nigris.

Antennæ black, thickly fringed with long scales to beyond the middle. Palpi [missing.] Head black. Thorax deep scarlet. Fore wings deep scarlet, the veins marked with lines of blackish

scales; the dorsal margin below the fold also blackish. *Hind* wings rather paler than the fore wings, a broad blackish border wider posteriorly. *Abdomen* [missing.] *Legs* black, with white rings on the tarsi, spurs and tufts black. *Exp. al.* 28 mm.

Hab. Darjeeling.

Туре, ♀, В. М.

16

[Pl. vi., fig. 4.]

lineata, Wlk., Cat. Lp. Ins. B. M., VIII., 261 (1856).

"Nigra; palpi thorace longiores; thorax et abdomen basi ochracea; alæ anticæ ochraceo venosæ, posticæ basi luteæ.

"Black. Palpi longer than the thorax. Thorax and base of the abdomen ochraceous. Hind wings luteous towards the base. Length of the body,  $2\frac{1}{2}$  lines; of the wings, 5 lines (=11 mm.).

"a. b. Para. From Mr. Bates' collection."

[Walker's types are male and female. The locality Para is a mistake; the insects were purchased from Argent's collection, and are labelled "Sidney." Other specimens stand in the British Museum collection under the MS. name "Pegella ægeriella"; these are labelled "Australia." This species is identical with Eretmocera? sesioides, F. & R., also from Sydney.—Wlsm.]

## flavipennis, F. & R.

3, Eretmocera? flavipennis, F. & R., Reis. Nov., pl. cxxxviii., 59 (1875).

"3, Amer.?"

The only knowledge I have of this species is from the published figure; the shape and general appearance seem to indicate its near alliance to Snellenia lineata, Wlk. I should propose to include it provisionally at least in this genus.

## [Pl. vi., fig. 5.]

latipes, Wlk., Cat. Lp. Ins. B. M., XXXI., 25 (1864).

"Mas. Viridis; caput subtus pectusque pallide flava; palpi basi pallide flavi; antennæ pubescentes; pedes anteriores flavo notati; tibiæ posticæ rufæ, apice nigræ, calcaribus duobus anticis fimbriatis; alæ anticæ lurido bifasciatæ; posticæ vitreæ.

"Male. Dark metallic-green. Head beneath, proboscis and pectus, pale yellow. Palpi smooth, slender, compressed, curved,

pale yellow at the base, rising high above the vertex; third joint longer than the second. Antennæ pubescent. Coxæ mostly, and anterior femora and biæ partly pale yellow; hind tibiæ long, stout, bright red, black towards the tips; first pair of spurs red, very unequal in length, with a black fringe, which is red towards the base in the shorter spur; hind tibiæ compressed, slightly dilated and fringed along the whole length. Wings narrow, with a broad fringe. Fore wings with two lurid bands; first band near the base broader than the second, which is at two-thirds of the length. Hind wings hyaline, colourless. Length of the body, 5 lines; of the wings, 10 lines (= 21 mm.).

"a. Para. From Mr. Bates' collection."

[Pl. vi., fig. 6.] bimaculata, Wlsm., n. s.

Antennæ yellow at the base, fringed with long deep purple scales beyond (the ends being broken off it is impossible to say how far this clothing extends). Palpi long, slender, recurved, yellow. Head and thorax smooth, shining, bronzy purple. Fore wings bright golden yellow, overspread with shining brownish purple at the base; the apical portion of the wing broadly brown, with a purplish lustre, this colour extending one-third along the dorsal margin; a brilliant metallic lilac spot lies at the end of the cell, and touches at its lower edge the inner extremity of the brown shading; this spot is preceded by a smaller spot of the same colour before the middle of the wing, both very conspicuous upon the golden yellow ground colour. Hind wings bright golden yellow, with a broad brown marginal band extending from the apex nearly to the abdominal angle, which is slightly transparent. Abdomen golden vellow, with a narrow brown transverse band across the middle, and a wider one of the same colour near the anal extremity. Exp. al. 16 mm.

Hab. Sandakan (Mr. H. J. S. Pryer). Type, ♀, Mus. Wlsm.

## Pseudægeria, n. g.

Type. Ochsenheimeria? squamicornis, F. & R.

Caput lævis. Palpi recurvi, articulo secundo æqualiter vestito, articulo apicali tenue, acuminato. Antennæ dense vestitæ, squamis elongatis, serrate congestis. Haustellum longum. Alæ anticæ elongatæ, marginalibus costali et dorsali parallelibus, apice de-

TRANS. ENT. SOC. LOND. 1889.—PART I. (MARCH.) C

presso; venæ apicali furcata, ceteris singulis. Alæ posticæ lanceolatæ, margine costali in medio arcuato apice obtuso, dimidio dorsali subhyalinis; venis tertia et quarta a pedicillo communi, sexta et septima simillimis. Tibiæ posteriores supra calcaria floccatæ.

Antennæ thickly clothed with erect scales from near the base, arranged in groups of unequal length, giving a strongly serrated appearance. Palpi recurved, 2nd and apical joints about equal in length, the former evenly clothed throughout, the latter slender, erect, acuminate. Head and thorax smooth. Fore wings elongate, margins parallel, apex depressed; neuration, 12 veins, 7 and 8 from a common stem, the rest separate, 3 and 4 approximate at base, 3 from or near angle of cell. Hind wings lanceolate, abdominal angle rather abrupt, costal margin slightly arched in the middle, somewhat widened at the anal angle; somewhat transparent about the dorsal and abdominal area; neuration, 8 veins, 3 and 4 from a short stem, 6 and 7 from a common point, 2 from outer third of cell. Abdomen somewhat flattened, fringed posteriorly with projecting lateral scales. Legs strongly tufted above the spurs.

### [Pl. iii.]

## squamicornis, F. & R.

§ , Ochsenheimeria! squamicornis, F. & R., Reis. Nov.,
pl. exxxix., 6 (1875).

"  ${\bf \hat{2}}$  , ins. vitianæ, Australia ? (M. C.)."

Capite nigro. Thorace nigro, sparse aurantiaco squamato, patagiis rufo-aurantiacis. Palpis nigris. Antennis nigris, dentate squamatis. Alis anticis elongatis, dimidio costali rufo-aurantiaco, dorsali nigro, margine apicali usque ad apicem anguste nigro; ciliis brunneis. Alis posticis apud marginem abdominalem albide subhyalinis, apud costam dilute aurantiaco suffusis, margine dorsali late brunneo; ciliis brunneis. Abdomine antice brunneo, postice nigro, linea transversa angustissime post medium albida. Tibiis nigris, calcaribus albidis.

Antennæ thickly fringed near the base with unequal tufts of long glossy black scales with a purplish tinge, having a dentated appearance. Palpi black, recurved, reaching well above the head; 2nd joint evenly clothed throughout, apical joint about equal to it in length, very slender and erect. Head and thorax glossy black, the latter streaked with reddish orange, a collar of smooth blackish purple scales extending over the anterior margin of the thorax; patagia reddish orange. Fore wings reddish orange on the costal half, glossy black on the dorsal half, a narrow semi-detached black

streak is scarcely divided from the black dorsal half, blending with it beyond the middle, the black is continued around the apical margin at the base of the cilia as far as the apex; cilia also dark, but with a slight brownish gloss. Under side pale reddish orange, suffused with brown within the anal angle. Hind wings whitish about the base of the abdominal margin, inclining to transparency, suffused with orange-yellow towards the costal margin, a broad band of brown along the dorsal margin towards the apex; cilia glossy brown. Under side pale reddish orange, suffused with brown around the dorsal margin. Abdomen: the anterior portion is dark brown, separated from the glossy black anal segments by a very narrow whitish line behind the middle, posteriorly fringed with projecting glossy brownish scales adjoining the anal tuft. Under side blackish. Legs glossy black, with strong tufts of scales above the spurs; spurs white. Exp. al. 21 mm.

Hāb. Fiji (F. & R.), Australia (B. M.), 66, 125.

This description is taken from the British Museum specimen, which is also a ?.—Wlsm.

(Е рематорора, Z.

Eretmocera (A) Oedematopoda, Z., Handl. Kong. Svensk. Ak., 1852, 96.

Type, ?. Œdematopoda princeps, Z.

" Eretmocera.

"Char. essent.—Caput læve. Antennæ uno latere squamis pili-

formibus alatæ, apice nudo. Alæ elongatæ.

"Char. nat.—Antennæ uno latere dense squamato-pilosæ, pilis sensim longitudine acutis, apice nudo. Capilli appressi, fronte rotundata. Palpi labiales mediocres, recurvi, articulo terminali longiore, tenui acuto. Haustellum mediocre spirale. Alæ elongatæ ciliis longis, posteriorum angulo anali subnullo. Abdomen breviusculum, crassum, planiusculum. Pedes robusti, tibiarum spinæ longiusculæ.

"(A) Oedematopoda.—Antennæ apice breviter nudo, pilis longis. Pedes medii et postici in articulorum apicibus squamato-nodosi, spinis uno latere pilosis. Abdominis latera non squamis margi-

natum.

"Genus hoc Oecophoræ eam partem, quæ espercllam, seleniellam, chenopodiellam, etc. continet, cum Elachistis æretella, modestella, etc. conjungere videtur. Distinguitur ab utrisque antennis non

simplicibus, sed a basi ultra medium in latere exteriore pilosis, palpis longioribus, abdomine latiore."

= Atkinsonia, Stn., Trans. Ent. Soc. Lond. (n. s.), V., 125 (1859).

Type. Atkinsonia clerodendronella, Stn.

- "Head smooth, broad, flat; labial palpi long, slender, recurved, terminal joint rather longer than the second joint. Antennæ stout, clothed on one side with long loose scales nearly to the tip. Anterior wings broadest beyond the middle, the costa being at first slightly concave; posterior wings narrow and pointed. Abdomen broad, depressed, with long scales at the side. Legs, especially the hind pair, with long tufts of scales.
- "A singular and beautiful genus, belonging to the family Elachistidæ."

Tabulation of the species comprised in the genus Edematopoda:—

- A. Fore wings yellowish, with black apex = princeps, Z.
- B. Fore wings unicolorous.
  - a. Fore wings cupreous = clerodendronella, Stn.
  - b. Fore wings red.
    - 1. Head and antennæ purplish = ignipicta, Btl.
    - 2. Head and antenna red = leechi, Wlsm.

### [Pl. iv.]

princeps, Z., Handl. Kong. Svensk. Ak., 1852, 96-7.

"Abdomine aurantiaco, apice nigro; pedibus chalybeo-nigris; alis ex basi aurantiacis, postice nigris, ciliis posteriorum a basi ad medium aurantiacis (\$\partial \text{)}\$. Magnitudine Oec. cuspidellæ minoris, sequentibus major. Caput violaceo-nigrum, fronte lata. Palpi thoracis longitudine, recurvi, graciles; articulo primo et secundo ochraceis, secundo squamis subincrassato, basim versus attenuato; terminali secundi longitudine, tenui, acuto, fusco. Haustelli dorsum ad basim squamis exalbidis tectum. Antennæ abdominis fere longitudine, latere exteriore dense pilosæ, pilis nigris, chalybeonitidis, paulatim magnitudine accrescentibus, ante antennarum ultimam octavam fere partem abrupte desinentibus; hæc pars terminalis nuda est, nigra, subserrata. Thorax lævigatus, niger, nitidulus. Patagia miniata, margine exteriore latius violaceo nigro. Pedes nigri, chalybeo-coerulei instar nitidi; anticorum coxæ et posticorum tibiæ ad basim miniatæ. Tibiæ tarsique pedum

posteriorum crassi; tibiæ posticæ quater squamis setisque incrassatæ, nodis apicem versus majoribus; spinæ uno latere pilis ciliatæ, apice nudo, acuto; tarsi postici et ipsi in articulorum apicibus squamis nonnihil tumidi, primo tumore reliquis distinctiore. Abdomen crassum, postice attenuatum, saturate aurantiacum; segmenta duo terminalia sicut venter nigra, violaceomitida; segmentum anale subconicum, truncatum oviductum testaceum exserit. Alæ anteriores  $3\frac{1}{2}$  longæ, ex basi angusta sensim dilatatæ, apice subobtusæ, aurantiacæ, majore parte postica nigræ, violaceo-nitidulæ. Color aurantiacus ad costam multo longius quam ad dorsnm propagatur, nusquam a nigro certis finibus separatus. In humero macula parva nigra adest. Cilia nigricant. Alæ posteriores anguste lanceolatæ, dilutius aurantiacæ, circa apicem acutum nigricant. Cilia ex basi ad marginis postici medium alis concolora, deinde omnino fusco-nigra. Subtus iidem colores. nisi quod aurantiacus in anterioribus alis majus spatium occupat nec in basi macula nigra inquinatur.

"Habitat in terra Natalensi." (Exp. al. 16 mm.).

It is worthy of notice that a specimen collected by Woodford in the Solomon Islands, and now in the British Museum, is so like this species as to be easily taken for it by a superficial observer. It is, however, somewhat larger, but possesses the same colouring, except that the dark cilia of the hind wings extend more towards the base. The body is rather black than yellow; the structure of the legs, even to the conspicuous fringes on the spurs, is precisely the same as in (Edematopoda princeps; the hind wings are certainly somewhat wider towards the apex, but the following characters seem to me to suffice to remove it, for the present at least, from the neighbourhood of all the genera treated of in this paper. Instead of the long recurved palpi possessed by all of these, it has extremely short, inconspicuous, drooping labial palpi of entirely different structure; moreover, the apical vein of the fore wings is not forked.

## [Pl. vi., fig. 7.]

clerodendronella, Stn., Trans. Ent. Soc. Lond. (n. s.), V., 125—6 (1859).

"Alis anticis cupreo-rufis; alis posticis dilutioribus, griseociliatis. Exp. al.  $6-6\frac{1}{2}$  lin. (= 13—14 mm.).

"Head and face purple. Second joint of the palpi reddish

orange; terminal joint purple. Antennæ purple-black, densely clothed along one side with long purple-black scales. Anterior wings brilliant coppery red, with the cilia greyish. Posterior wings reddish orange, with grey cilia. Thorax coppery red. Abdomen blue-black, with a slender whitish belt nearly in the middle. Legs black spotted with white; the hind legs with the spines replaced by thick tufts of black scales\*; the tarsi also much thickened with black scales.

"Larva dirty brown; head dark reddish brown; second segment black. It feeds in the tops of *Clerodendron*, drawing together the leaves with a white web.

"The perfect insects made their appearance on the 27th July, 1856; the insect, when at rest, erects its beautifully plumed hind legs above its back, behind the head, and keeps constantly vibrating its incrassated antennæ.

"Collected near Calcutta by Mr. Atkinson."

# [Pl. vi., fig. 8.]

ignipieta, Btl., Trans. Ent. Soc. Lond., 1881, 593-4.

[Capite thorace et antennis purpureis. Alis anticis rubidis, subpurpurascentibus, basi et margine costali peranguste purpureo, margine dorsali ante angulam analem latiore purpureo; ciliis fuscis. Alis posticis brunneis; ciliis griseo-fuscis. Abdomine et tibiis purpureis.—Wlsm.]

"Purplish black; primaries with a very broad carmine subcostal streak from near the base to the outer margin, where it meets a narrow stripe of the same colour, which runs round the margin half-way to the base; secondaries dark bronzy brown; head shining, smooth, plumbageous; thorax showing fiery eupreous points in certain lights; abdomen with extremely narrow orange posterior margins to the segments; under surface bronzy brown; primaries cupreous towards the base, purplish towards the apex, and with purple costal margin; pectus, as seen between the large coxæ, brilliant opaline; legs slightly opaline along the centre of the inferior margins; the long setose antennæ, and the spines and bristles upon the legs, black; expanse of wings, 8 lines (= 17 mm.)

"Tokei (Fenton).

"A very beautiful little species of this singular genus."

Since this paper was written Mr. H. Druce has kindly

given me a specimen of a species of Œdematopoda almost undistinguishable from ignipicta. It differs in the more streaked appearance of the fore wings; the dorsal margin is not uniformly black, the base of the wing being also decidedly red, not black; two lines of black scales are visible above the fold, but the specimen is not in condition to be described as the type of a new species. It was collected by Mr. W. Doherty at Perak, thus extending our knowledge of the geographical distribution of this interesting genus.

[Pl. vi., fig. 9.] leechi, n. s.

Capite rufo, fronte violaceo-fusco. Thorace antice rufo, postice violaceo-fusco. Antennis dense et late pilosis rufis, apice et basi violaceo-fuscis. Alis anticis rufis, angustissime violaceo-fusco marginatis; linea subdorsali ex basi per plicam violaceo-fusca; ciliis fuscis. Alis posticis cupreo-brunneis; ciliis dilute fuscis. Abdomine fusco-purpureo. Tibiis posticis violaceo-fuscis.

Antennæ red along the middle, but with the base and apex purplish fuscous, with an erect fringe of very long scales, corresponding in colour to the part from which it rises, the extreme apical joints only naked. Palpi slender, recurved, pale bronzy fuscous above, greyish fuscous beneath. Haustellum greyish fuscous. Head red above; face violaceous-fuscous. Thorax red, tending to violaceous-fuscous posteriorly. Under side shining greyish fuscous. Fore wings red, very narrowly margined with purplish fuscous by a slender line along the extreme costal and dorsal margins, but not reaching to the apex; a streak of similar colour extends from the base across the fold, vanishing above the anal angle; cilia fuscous. Under side violaceous. Hind wings brownish cupreous, with fuscous cilia, the extreme base at the abdominal angle transparent. Under side shining pale fuscous. Abdomen deep purple, with a narrow paler spot at the base. Under side purple. Legs tinged with purple, with long spurs, and also fringed with purplish scales, having tufts of purplish scales above at the joints, Exp. al. 15 mm.

Hab. Satsuma, Japan, May, 1886 (Mr. J. H. Leech). Type,  $\mathcal{F}$ , Mus. Wlsm.

This species differs from *ignipicta*, Btl., to which it is nearly allied, in the beautiful red-fringed antennæ, and in the red head and thorax, which in that species are

purplish, and also in the brighter red of the anterior wings.

Eretmocera, Z. = Staintonia, Sigr. = Exodomorpha, Wlk. = Castorura, Meyr.

Eretmocera (B) Eretmocera, Z., Handl. Kong. Svensk. Ak., 1852, 96.

(ἐρετμός, remus; κέρας, antenna).

Type, ♂ ♀ . Eretmocera fuscipennis, Z.

"Eretmocera.

"Char. essent.—Caput læve. Antennæ uno latere squamis piliformibus alatæ, apice nudo. Alæ elongatæ.

"Char. nat.—Antennæ uno latere dense squamato-pilosæ, pilis sensim longitudine acutis, apice nudo. Capilli appressi, fronte rotundata. Palpi labiales mediocres, recurvi, articulo terminali longiore, tenui, acuto. Haustellum mediocre spirale. Alæ elongatæ ciliis longis, posteriorum angulo anali subnullo. Abdomen breviusculum, crassum, planiusculum. Pedes robusti, tibiarum spinæ longiusculæ.

"(B) Eretmocera.—Antennæ paulo ultra medium usque pilosæ, pilis brevioribus. Pedes squamis non nodosi. Abdomen utrinque squamis marginatum.

"Genus hoc Oecophoræ eam partem, quæ csperellam, seleniellam, chenopodiellam, etc. continet, cum Elachistis æratella, modestella, etc. conjungere videtur. Distinguitur ab utrisque antennis non simplicibus, sed a basi ultra medium in latere exteriore pilosis, palpis longioribus, abdomine latiore."

# = Staintonia, Stgr., Stett. Ent. Zeit., XX., 250 (1859). Type, δ ♀. Staintonia medinella, Stgr.

"Caput obtusum, squamis appressis. Ocelli nulli.\* Antennae crassae, in 3 pubescenti-ciliatae. Palpi labiales adscendentes, recurvi, acuminati. Haustellum longum, basi squamatum. Alae anteriores elongatae; posteriores angustissime lanceolatae, cellula media aperta, costa media interiore tripartita, costa media exteriore tripartita. Abdomen depressum, squamis lateralibus erectis.

"Dem genus *Butalis* am nächsten; besonders durch den von oben nach unten sehr stark zusammengedrückten Leib, dessen Ränder durch grosse seitlich abstehende Schuppen gezähnt erscheinen, verschieden. Die Fühler sind bedeutend dicker als

<sup>\*</sup> This is an error. I find ocelli present in my specimens received from Dr. Staudinger.

bei allen mir bekannten Butalis-Arten. Der Rippenverlauf ist gleichfalls verschieden, namentlich auf den Hinterflügeln, wo die Mittelzelle ganz offen ist. Die innere Mittelrandsrippe theilt sich in drei, die äussere in zwei Aeste. Genaueres werde Ich später geben."

# 3 9 = Eхоромогрна, Wlk., Cat. Lp. Ins. B. M., XXIX., 833 (1864).

# Type. Exodomorpha divisella, Wlk.

"\$\(\gamma\). Corpus robustum. Proboscis brevis. Palpi læves, arcuati, ascendentes, capitis latitudine longiores. Antennæ subincrassatæ, apices versus subfimbriatæ. Abdomen ales posticas longissime superans. Pedes læves, validi; tibiæ posticæ calcaribus longis approximatis. Alæ anticæ perangustæ, apice rotundatæ; posticæ longissime fimbriatæ.

"Body stout. Proboscis short. Palpi smooth, curved, rising a little higher than the vertex, longer than the breadth of the head; third joint setiform, shorter than the second. Antennæ shorter than the fore wings, slightly incrassated, except towards the tips, slightly fringed at the end of the incrassated part. Abdomen extending for three-fourths of its length beyond the hind wings. Legs stout, smooth; hind tibiæ with four long approximate spurs. Wings very narrow. Fore wings rounded at the tips; costa straight; exterior border extremely oblique. Hind wings with a very long fringe."

### = Castorura, Meyr., Proc. Linn. Soc. N. S. W. (2nd ser.), i., 1047 (1887).

## Type, Q. Castorura chrysias. Meyr.

"Head smooth; ocelli present; tongue well-developed. Antennæ almost as long as the fore wings, basal half thickened with scales, becoming long and roughly projecting on back towards middle, basal joint elongate, rather dilated terminally, without pecten. Labial palpi moderate, curved, ascending, slender, loosely rough-scaled beneath throughout, terminal joint almost as long as second, acute. Maxillary palpi obsolete.\* Abdomen (in 2) very broad, flattened; apical segment with lateral tufts of scales. Posterior tibiæ smooth-scaled, spurs long, tarsi somewhat rough beneath. Fore wings elongate-lanceolate; vein 1 simple, 2 from  $\frac{3}{4}$  of cell, 6 and 7 stalked, 7 to costa, 8 absent, 9 from near 7, 11

<sup>\*</sup> The maxillary palpi are so minute as to be easily overlooked, but they are visible under a microscope.

from  $\frac{3}{4}$ . Hind wings  $\frac{2}{3}$ , elongate-lanceolate, cilia 2; costa towards base with a fringe of rough scales drawn over wing; veins 2, 3, 4, 5 equidistant and parallel, 6 and 7 approximated at base."

Tabulation of the species comprised in the genus Eretmocera:—

A. Fore wings unicolorous.

26

- a. Hind wings yellow = derogatella, Wlk.
- b. Hind wings red.
  - 1. Fore wings brown = fuscipennis, Z.
  - 2. Fore wings purple = carteri, Wlsm.
- B. Fore wings 3-spotted = latissima, Z.
- C. Fore wings with two spots and a streak.
  - a. Streak straight, medio-basal.
    - 1. Streak clear and distinct, no black spot on anal segment = basistrigata, Wlsm.
    - 2. Streak indistinct, sometimes obsolete, a black band across anal segment = scatospila, Z.
  - b. Streak taking the form of a dorsal lunule.
    - 1. Hind wings red = miniata, Wlsm.
    - 2. Hind wings yellowish.
      - a. With a dark bar across anal segment

= dorsistrigata, Wlsm.

- β. With dark lateral disconnected fascicules on anal segments = lunifera, Z.
- D. Fore wings 4-spotted.
  - a. Spots distinct.
    - 1. Hind wings brown = impactella, Wlk.
    - 2. Hind wings yellow = chrysias, Meyr.
  - b. Spots indistinct, the basal pair blended = medinella, Stgr.

## [Pl. vi., fig. 10.]

fuscipennis, Z.,\* Handl. Kong. Svensk. Ak., 1852, 97-9.

"Alis anterioribus brunneis; posterioribus supra fuscescentibus, subtus puniceis, ciliis circa apicem fuscis, ceteris puniceis; abdomine coccineo, macula baseos dorsali segmentoque anali fuscis ( $\mathcal{F}$   $\mathfrak{P}$ ).

"Var. b, ut a, sed colore flavissimo pro puniceo coccineoque d.

"Quæ hic sub *Eretmocera* enumero quatuor nomina, utrum ad species diversas vere pertineant an varietates solum unius speciei denotent, persuasum mihi non est. Insectis his eadem omnibus structura, nec differunt fere nisi pictura. Quum vero *E. lætissimæ* specimina quatuor inter se simillime maculata, saltem in alis, comparem, consultius esse opinatus sum, in picturæ differentia

<sup>\*</sup> fuscipennis, Z., is now restricted to the red form (var. a); the yellow form (var. b) = derogatella, Wlk.

differentiam specierum agnoscere et tempori futuro relinquere ut me aut confutet aut comprobet.

"Differt E. fuscipennis a sequentibus alis anterioribus omnino immaculatis. Caput et thorax brunnea; occiput squamis nonuullis flavis ciliatum est. Palpi recurvi, thoracis longitudine, satis graciles, ad basim et in dorso late albidi, subtus fuscescentes: articulus terminalis præcedenti longitudini subæqualis, multo tennior, acutissimus. Haustellum in basi crassum ibique ad latera albo squamatum ceterum brunnescit et ad anum fere extendi Antenuæ abdominis longitudine, fuscæ, a basi ultra medium in latere exteriore squamis approximatis incrassatum. quæ apicem versus longiores fiunt ac violaceo colore nitent; nuda pars apicalis filiformis, pube tenera ciliata. Feminæ antennæ magis luteo-brunneæ squamisque rarioribus tenuiores; sed eas ut totum animal nonnihil detritas esse adspectus docet; ceterum earum structura eadem quam in mare. Pectus pallide flavum. Pedes brunnei, femora subtus exalbida, tibiæ violaceo-nitidæ; posticæ in dorso ante medium fasciculum pilosum modicum gerunt. Abdomen planum, utrimque squamarum elongatarum ac piliformium fasciculis marginatum, coccineum (in varietate b flavissimum) una cum squamis; ad basim macula transversa fusca; segmentum anale nigrum, squamis nonnullis ex ano eminentibus puniceis; valvularum analium margo ochraceus; venter pallide flavus, squamulis fuscescentibus adspersus, macula utrimque ad lateris medium fuscescens irregularis.

"Alæ anteriores  $\mathfrak{F}$  3"",  $\mathfrak{F}$   $2\frac{2}{3}$ " longæ, brunneæ, subnitidulæ, cilia fusca. Subtus violaceo nitent; sub costa reflexa linea ex basi attenuata flava ad mediam alæ longitudinem procurrit, lineaque in disco obsoleta supra angulum dorsalem in varietate a conspicitur, quæ varietas b caret.

"Alæ posteriores anguste lanceolatæ, valde acutæ, dilute brunneæ, basim versus dilutiores ibique squamis pallide puniceis (in var. b flavidis) immixtis. Subtus puniciæ (var. b flavæ), apice ipso fusco. Cilia utriusque paginæ in var. a punicea, in var. b flava, in utraque varietate circa apicem latius fusca.

"Habitat in tractibus fluviorum Limpoponis et Gariepis." (Exp. al. 16 mm.).

# = 3 \, Exodomorpha inclusella, Wlk., Cat. Lp. Ins. B. M., XXIX., 834 (1864).

"\$\mathscr{G}\$ \text{?. Purpureo-cuprea}; caput subtus pectorisque latera aurato-flava; abdomen aurato-rufum, basi apice ventreque auratis, macula basali fasciaque subapicali purpureo-cupreis; alæ posticæ auratæ, costa fimbriaque rufis.

28

"Dark purplish cupreous. Head beneath and sides of the thorax pale gilded yellow. Abdomen gilded red, with a purplish cupreous spot near the base, which is gilded; a purplish cupreous subapical band; tip and under side gilded. Hind wings gilded; costa and fringe red, the latter blackish cupreous towards the tip. Length of the body,  $2\frac{3}{4}$  lines; of the wings,  $5\frac{1}{2}$  lines (= 12 mm.).

"E. divisella, var.?

"a. Port Natal. From M. Gueinzius' collection. b. South Africa. From Mr. Argent's collection."

Туре, ♂♀, В. М.

[Pl. vi., fig. 11.] carteri, n. s.

Alæ anticæ unicolores, subnitidæ, viride-purpuriæ, ciliis fuscis. Alæ posticæ cupreæ, ciliis ante medium coccineis, post medium fuscis. Abdomine coccineo, macula basali purpureo, apicali nigro. Capite, antennis, thorace, et tibiis purpureo-fuscis.

Antennæ purplish fuscous. Palpi purplish fuscous, yellowish at the base externally. Head purplish fuscous. Thorax greenish, or purplish fuscous above, bright ochreous beneath. Fore wings glossy green, or purplish; cilia fuscous. Under side brownish fuscous, tinged with purplish, a slight ochreous streak from the base reaching nearly half-way along the costal margin. Hind wings coppery brown; cilia before the middle carmine, beyond it dark fuscous. Under side carmine; cilia fuscous, except at the base of the abdominal margin. Abdomen brilliant carmine, tinged with ochreous about the basal portion, a patch at the base rich purple, and the anal segments black fringed with carmine. Under side ochreous. Legs dark purplish fuscous. Exp. al. 12 mm.

Hab. Bathurst (Mr. G. T. Carter).

Type, &, Mus. Wlsm.

One of my three specimens from Bathurst, collected by Mr. G. T. Carter, has the anal segments entirely carmine, without any black whatever.

[Pl. vi., fig. 12.]

derogatella, Wlk., Cat. Lp. Ins. B. M., XXIX., 834 (1864).\*

"J. Cuprea; caput subtus pectorisque latera aurato-flava; abdomen aurato-flavum, apice nigrum; alæ posticæ auratæ.

<sup>\* =</sup> fuscipennis, Z., var. b. (ante, pp. 26—7).

"Cupreous. Head beneath and sides of the pectus gilded yellow. Abdomen gilded yellow; tip partly black. Hind wings gilded tip and exterior part of the fringe gilded. Length of the body,  $2\frac{3}{4}$  lines; of the wings,  $5\frac{1}{2}$  lines (= 12 mm.).

"a. Port Natal. From M. Gueinzius' collection."

Type, ♂, B. M.

[Pl. vi., fig. 13.] dorsistrigata, n. s.

Capite brunneo. Palpis subflavidis. Antennis violaceo-fuscis. Thorace brunneo. Alis anticis brunneis, subænescentibus, lunula dorsali ante medium, maculisque duabus post medium oppositis, flavidis; ciliis fuscis. Alis posticis dilute brunneis, ænescentibus, in basi subflavidis; ciliis aurantiacis apud apicem fuscis. Abdomine aurantiaco, in basi flavo, macula prope basim purpureo, vittaque anali purpureo apicem non attingente. Tibiis purpureo fuscis.

Antennæ purplish fuscous. Palpi pale vellowish above, brownish fuscous beneath, except on the basal one-third. Head bronzy brown, a few pale yellow scales separating it from the thorax at the sides. Thorax bronzy brown. Fore wings bronzy brown, with a pale, oblique, dorsal patch at the basal third, reaching nearly to the middle of the wing, and two opposite on the outer third about equal in size, the first on the costa, the second at the anal angle, all pale lemon-yellow; cilia fuscous. Under side bronzy brown, the extreme costal margin very pale ochreous, a line of orange scales extending from the middle of the base to the anal angle. Hind wings golden brown, tending to pale vellowish on the upper part of the costal half, costal cilia pale yellow to beyond the middle; orange-vellow on the dorsal margin for the same distance, thence fuscous around the apex. Under side orange-yellow, thickly sprinkled with vermilion scales; cilia orange-yellow to beyond the base, thence fuscous. bright vellow at the base, near which is a deep purple bar, not reaching to the sides; below this bar the abdomen is orange, with a wide purplish fuscous band crossing the anal segment, which leaves the anal tuft pale ochreous. Under side whitish. Legs purplish fuscous, femora whitish, some wide pale ochreous bands across the tibie and tarsi beneath. Exp. al. 15 mm.

Hab. Zanzibar (Mr. F. J. Jackson).

Type, &, Mus. Wlsm.

This species is apparently allied to lunifera, Z., figured Trans. Ent. Soc. Lond., 1881, Pl. XIII., 41. It differs

in the bronzy-brown colour of the anterior wings, in the larger oblique yellowish patch on the dorsal margin, further removed from the base, in the yellow base of the abdomen, followed by a dark band, and in the complete dark bar crossing the anal segments; whereas in lunifera the lateral fascicules of scales only are dark.

# [Pl. vi., fig. 14.]

lunifera, Z., Handl. Kong. Svensk. Ak., 1852, 100.

"Alis anterioribus fuscis, lunula dorsali ante medium punctisque duobus posticis oppositis flavis; posterioribus subtus cum ciliis interioribus flavis; abdomine flavo, ani subtus macula fusca (?).

"Speciminis tantum alæ anteriores probe conservatæ sunt. Hæ lunulam dorsalem punctaque duo opposita habent, quibus et a

scatospila et a lætissima distinguuntur.

"Caput et thorax fusca, occipitis, margo flavo-squamatus. Antennæ fuscæ (fractæ), eadem ut in scatospila structura esse videntur. Palpi in basi et in dorso flavidi, subtus fuscescentes. Pectus ochraceum. Pedes fusci, femoribus subtus flavidis, tibiis posticis violaceo-nitidis, fusco-spinosis. Abdomen flavum in basi fuscum; fasciculi laterales (plerique desunt) segmentorum postremorum flavi, fasciculus segmenti analis niger apicem ani non attingit; venter pallidior quam dorsum dimidio basali segmentoque anali, exceptis fasciculis lateralibus, nigris.

"Alæ anteriores 23" longæ, fuscæ, signis subcitrinis. Lunula tenuis dorsalis longe ante alæ medium, valde inclinata, dimidiam alæ latitudinem superat. Postice puncta duo perpendiculariter opposita, majus angulo dorsali insidens, minus margini costali.

"Alæ posteriores brunneæ, basim versus dilutiores flavoque mixtæ; cilia flava, circa apicem late fusca.

"Subtus alæ ant. fuscæ, linea flava sub costa replicata brevi. Lunulæ flavæ apex in lineam plicæ transit, quæ supra angulum dorsalem marginem posticum tangit ibique incrassata est. Posteriores flavæ apice breviter fuso; cilia ut supra.

"Habitat ubi præcedens" (in tractibus fluviorum Limpoponis et Gariepis). (Exp. al. 12 mm.).

# [Pl. vi., fig. 15.] miniata, n. s.

Capite violaceo-fusco. Thorace violaceo-fusco, postice flavide bimaculata. Alis anticis purpureo-fuscis, lunula dorsali ante medium, maculisque duabus post medium oppositis flavidis; ciliis fuscis. Alis posticis æneo-purpureis; ciliis miniatis, circa apicem fuscis. Abdomine miniato, in basi flavo, macula lumulari prope basim purpurea, fasciculis duobus lateralibus segmenti analis nigris. Tibiis violaceo-fuscis.

Antennæ bronzy brown, fringed with purplish scales to beyond Palpi fuscous, whitish at the base. Haustellum whitish at the base. Head bronzy fuscous, a few yellow scales at the back. Thorax bronzy fuscous, with two pale yellow spots at its posterior margin. Fore wings purplish fuscous, with three pale yellow spots, the first obliquely curved, extending across the fold from near the base of the dorsal margin to the upper half of the wing; the second and third about the commencement of the apical third of the wing, one costal, the other dorsal and slightly nearer the base, both of equal size; cilia dark fuscous. Under side tinged with golden yellow at the base, bronzy fuscous beyond, with a vermilion streak running along the middle from the base to the anal angle. Hind wings bronzy, tinged with golden red at the base; cilia at the basal two-thirds of the costal and dorsal margins carmine, beyond dark fuscous. Under side vermilion; cilia carmine, dark fuscous around the apex. Abdomen vermilion, with a yellow band at the base, wider in the middle than at the sides, followed by a dark purple crescent-shaped spot, the anal segments with a tuft of black scales on each side. Under side pale ochreous, with two square-edged lateral patches near the base and a wide bar across the anal segments, purplish fuscous. Legs brouzy fuscous above, spurs and under sides pale ochreous. Exp. al. 14 mm.

Hab. Zanzibar (Mr. F. J. Jackson); Port Natal (Gueinzius, B. M.).\*

Type, ♂♀, Mus. Wlsm.

## [Pl. vi., fig. 16.]

Eretmocera scatospila, Z., Handl. Kong. Svensk. Ak., 1852, 99-100.

"Alis anterioribus brunneis, linea ex basi, maculis duabus posticis oblique suboppositis lituraque apicis obsoletis lutescentigriseis; posterioribus subtus cum ciliis interioribus coccineis; abdomine coccineo, macula baseos dorsali segmentoque anali nigris ( $\mathfrak{P}$ ?).

"Minor quam 3 præcedentis (fuscipennis). Differt ab ea specie alis anterioribus maculatis, a sequentibus (lunifera and lætissima) maculis obsoletis segmentique analis apice coccineo.

<sup>\*</sup> This species was confused with divisella by Walker (see p. 33).

"Caput et thorax brunnea, occipitis squamæ marginales nonnullæ flavidæ. Antennæ ut in E. fuscipenni, sed squamis longioribus incrassatæ, fusco-nigræ. Palporum basis et dimidium
basale articuli secundi sordide exalbida, reliqua pars in dorso
albida, subtus fuscescens. Pectus flavescit. Pedes luteo-brunnei;
spinæ anteriorum pars a luce aversa et tarsorum posticorum articuli
subtus colore sunt exalbido; tibiarum posticarum dorsum ex basi
ad medium usque flavidum. Abdomen in dorso coccineum; in
basi macula nigra, coeruleo-nitida, posterius coarctata segmenta
duo occupat. Segmentum anale nigrum, macula apicali vitellina;
venter pallide ochraceus, vitta utrimque postice acuminata nigricanti; segmentum anale vitellinum, utrimque late nigrum.

"Alæ anteriores  $2\frac{2}{3}$ " longæ, luteo-brunneæ, opacæ, maculas lutescenti-griseas squamis elongatis compositas gerunt. Linea indeterminata hujus coloris e media basi procedens ante mediam alam evanescit. Maculæ duæ posticæ ita oppositæ sunt, ut altera angulum dorsalem impleat, altera costalis apici alæ propior sit. Apex ipse maculam parvam, parum distinctum habet. Præterea squamæ griseæ nonnullæ hic illic sparsæ.

"Alæ posteriores brunnescentes, apice fusco. Cilia ex basi ad medium usque coccinea, deinde fusca.

"Subtus alæ ant. fuscæ. Linea flava sub costa reflexa ex basi ad apicem alæ fere excurrit. Linea altera aurantiaca plicam sequens pone mediam alam incrassata cum dorsi colore flavido cohæret. Posteriores puniceæ, apice solo cum ciliis circumdantibus nigræ.

"Habitat in tractibus fluviorum Limpoponis et Gariepis." (Exp. al. 14 mm.).

## [Pl. v.]

### Eretmocera basistrigata, n. s.

Alæ anticæ purpureo-fuscæ, striga basali et maculis duabus marginalibus oblique oppositis ochreo-flavis; ciliis fuscis. Alæ posticæ puniciæ, apice et ciliis apicalibus fuscis. Abdomine puniceo. Antennis et tibiis purpureo-fuscis. Palpis ochraceis. Thorace ochreo bistrigato.

Antennæ purple. Palpi ochreous, with a fuscous line along the under side of the apical joint, and at the apex of the 2nd joint. Head shining bronzy fuscous. Thorax shining bronzy fuscous, marked with two lateral bright ochreous streaks, and fringed posteriorly with the same colour, blending with the crimson of the abdomen. Under side shining yellow ochre. Fore wings purplish fuscous, with a conspicuous basal streak extending nearly half-way along the middle of the wing, followed by two spots, the larger of

which at the anal angle precedes the smaller on the costal margin; these markings are bright yellow ochre; cilia smoky fuscous. Under side crimson, tinged with fuscous. Hind wings crimson, tipped with fuscous; cilia smoky fuscous around the apex, bright carmine along the basal two-thirds of the abdominal margin. Under side similar to the upper. Abdomen crimson, the centre of the anal segment sometimes tinged with fuscous, its lateral fringes ochreous. Under side shining yellow ochre, tinged with purple at the base. Legs purplish fuscous. Exp. al. 13 mm.

Hab. Bathurst, West Africa (Mr. G. T. Carter). Type. ♂, Mus. Wlsm.

## [Pl. vi., fig. 17.]

lætissima, Z., Handl., Kong. Svensk. Ak., 1852, 100-1.

"Alis anterioribus brunneis, macula subdorsali ante medium majore duabusque posticis oblique oppositis flavissimis; posterioribus puniceis apice fusco ( $\mathcal{J}$ ).

"Maculæ alarum anteriorum flavissimæ et majores hanc a præcedentibus distinguunt. Caput et thorax brunnea. Margo occipitis posticus, patagiorum margo interior et apex, maculaque eorum apici contigua flava. Antennæ ut in scatospila, squamis violaceo-nitidis. Palpi ut in prioribus. Pectus læte flavo-maculatum. Pedes fusci, ad femorum basim pallide flavi; posticorum femora in uno latere, tibiæ in basi et sub primo spinarum pari pallide flavæ; spinæ earum albidæ. Abdomen supra puniceum, ad basim macula indistincta fusca. Venter flavus. Segmenti analis fasciculis superne puniceus, subtus flavus, interne ater, quo colore pili laterales in uno specimini late tincti sunt.

"Alæ anteriores  $2\frac{1}{2}$ — $2\frac{3}{4}$ " longæ, obscure brunneæ, sub apicem violaceo-nitidulæ, maculis flavissimis ornatæ. Macula prima oblonge ovata non longe a basi plicam ita occupat, ut major ejus pars dorso alæ quam costæ adjaceat. Maculæ duæ reliquæ minores oblique oppositæ, altera in angulo dorsali, altera in costa apici vicinior.

"Alæ posteriores puniciæ, apice fusco. Cilia punicea, circa apicem late fusca.

"Subtus alæ puniciæ; anteriorum costa cum apice ciliisque omnibus nigra, linea sub costa replicata brevis flava; posteriorum color ut supra.

"Habitat in tractibus fluviorum Limpoponis et Gariepis." (Exp. al. 14 mm.).

# = \$\delta\$, Exodomorpha divisella, Wlk., Cat. Lp. Ins. B. M., XXIX., 833—4 (1864).

"\$\(\gamma\)\ Obscure purpureo-cuprea; caput subtus pectorisque latera aurato-flava; abdomen coccineum, basi ventreque aurato-flavis, maculis tribus purpureo-cupreis, fasciis duabus ventralibus purpureis; alæ anticæ guttis tribus flavis; posticæ auratæ, costa fimbriaque rufis.

"Dark purplish cupreous. Head beneath and pectus on each side pale gilded yellow. Abdomen scarlet, with a purplish cupreous spot near the base, which is gilded yellow; a purplish cupreous spot on each side at the tip; under side gilded yellow, with two purplish bands; first band near the base widely interrupted; second subapical entire. Fore wings with three pale yellow dots; first dot discal, near the base; second costal, opposite the third, which is near the end of the interior border. Hind wings gilded; costa and fringe red, the latter blackish cupreous towards the tip of the wing. Length of the body,  $2\frac{3}{4}$  lines; of the wings,  $5\frac{1}{2}$  lines (= 12 mm.).

\*"a, b. Port Natal. From M. Gueinzius' collection. c—e. Sierra Leone. From Mr. Foxcroft's collection." Type, & ?, B. M.

## [Pl. vi., fig. 18.]

# impactella, Wlk., Cat. Lp. Ins. B. M., XXIX., 637—8 (1864). (Gelechia, Wlk.).

"Obscure cuprea, subtus albida; abdomen luteum, basi apiceque cupreum; alæ anticæ angustæ, acutæ, lituris duabus posticis, una discali unaque exteriore albidis.

"Dark cupreous, slender, whitish beneath. Palpi slender, much longer than the breadth of the head; third joint setiform, a little shorter than the second. Antennæ smooth, rather stout. Abdomen luteous, dark cupreous towards the base and towards the tip. Wings narrow, acute; fringe long. Fore wings with a whitish streak along the base of the interior border, and with three whitish elongated spots; first spot in the disk before the middle; second on the interior border beyond the middle; third costal nearer the tip; exterior border very oblique. Length of the body,  $3\frac{1}{2}$  lines; of the wings,  $9\frac{1}{7}$  lines (15 mm.).

"a. b. North Hindostan. From Mr. James' collection.

<sup>\*</sup> These two specimens are miniata, Wlsm., the description of divisella being evidently taken from the Sierra Leone specimens. 
† This is apparently an error for 7".

"This species appears to have some affinity to the Egeriida."

Type, ♂, B. M.

A single specimen in the British Museum from North India, not in sufficiently good condition for description, is closely allied to *impactella*. It has a very faint indication of two dorsal yellowish spots on its unicolorous brownish fore wings. The purple band on the yellow abdomen is wider than in *impactella*, and stretches farther downwards.

## [Pl. vi., fig. 19.]

chrysias, Meyr., Proc. Linn. Soc. N. S. W. (2nd ser.), I., 1047—8 (1887).

[Capite et thorace ænescenti-fuscis. Antennis purpureo-fuscis. Alis anticis purpureis, maculis quatuor flavis, duabus dorsalibus, tertiæ subcostali, quarta costali ante apicem; ciliis fuscis. Alis posticis ænescenti-flavidis; ciliis flavidis, partem griseo-fuscis. Abdomine aurantiaco, fascia prope basim purpurea, segmento anali purpureo-fusco.—Wlsm.]

"?, 15 mm. Head, palpi, antennæ, thorax, and legs dark purplish fuscous; palpi yellow-whitish towards base; thorax with posterior extremity orange. Abdomen orange-yellow, anal segment purple-blackish, except apex. Fore wings purple-black, with four roundish yellow spots; first on inner margin towards base; second largest, in disc before middle; third on inner margin before anal angle; fourth on costa beyond third; cilia purple-black. Hind wings yellow, apical fourth dark purple-fuscous; cilia dark grey, towards anal angle yellowish.

"Maryborough, Queensland; one specimen (coll. Macleay)."

# [Pl. vi., fig. 20.]

medinella, Stgr., Stett. Ent. Zeit., XX., 250-1 (1859).

"Vorderflügel erzschillernd braun mit weisslichen Schuppen mehr oder weniger gemischt, und mit zwei weisslichen, nicht scharf begrenzten Querbinden, die eine bei  $\frac{1}{3}$ , die andere vor dem Aussenrande. Letztere macht in der Mitte eine bedeutende Biegung. Hinterflügel dunkel. Der Leib roth, namentlich bei

36

den Weibehen. Der After bleibt stets und die ersten Segmente meistens nach oben blauschwarz.

"Kalisch entdeckte diese Art in Juni bei Chiclana auf den Blüten von Umbelliferen sitzend."

### INDEX.

#### TINÆGERIA. Wik.

Cat. Lp. Ins. B. M. VIII. 260 (1856); Wlsm. ante 10-11 (1889). Type Tinageria ochracea Wlk.

[= Arauzona Wlk. Cat. Lp. Ins. B. M. XXXI. 25-6 (1864); Wlsm. ante 8-9, 11 (1889). Type Arauzona basalis Wik.]

♂ ochracea Wlk. Cat. Lp. Ins. B. M. VIII. 260 (1856); Wlsm. ante 11—13, Pl. i. (1889).

> = Eretmocera? ceneiceps F. & R. Reise Novara, pl. exxxviii. 62 (1875); Wlsm. ante 9, 12 (1889). (Type Q ? Vienna).

Imago, October. Hab. S. America—Para, Bogota, Santarem.  $(Type \ \mathcal{F} \ \mathcal{P} \ B. M.)$ 

& fasciata Wlk. Cat. Lp. Ins. B. M. VIII. 261 (1856); Wlsm. ante 13, Pl. vi. 1 (1889).

Hab. S. America-Para. (Type & B. M.)

9 basalis Wlk.

Arauzona basalis, Wlk. Cat. Lp. Ins. B. M. XXXI. 26 (1864); Wlsm. ante 8-9 (1889). Tinægeria basalis, Wlsm. ante 13, Pl. vi. 2 (1889). Hab. S. America-Ega.

 $(Type \ Q \ B. M.)$ 

### SNELLENIA, Wlsm., g. n.

ante 13-15 (1889). Type Snellenia coccinea, Wlsm.

& coccinea Wlsm sp. n. ante 15, Pl. ii. (1889).

Imago, July. Hab. India-Sikkim. (Type & Mus. Wlsm.)

♀ tarsella Wlsm. sp. n. ante 15—16, Pl. vi. 3 (1889).

Hab. India—Darjeeling. (Type Q B. M.)

### ♂ ♀ lineata Wlk.

Tinægeria lineata Wlk. Cat. Lp. Ins. B. M. VIII. 261 (1856); Wlsm. ante 8, 9—10 (1889).

Snellenia lineata Wlsm. ante 16, Pl. vi. 4 (1889).

= Eretmocera ? sesioides F. & R. Reise Novara, pl. cxl. 22 (1875); Wlsm. ante 9—10 (1889).

(Type Q ? Vienna).

Imago, February.

Hab. Australia-Sydney.\*

(Type ♂ ♀ B. M.)

### & flavipennis.

Eretmocera? flavipennis F. & R. Reise Novara, pl. exxxviii. 59 (1875); Wlsm. ante 9—10 (1889).

Snellenia flavipennis Wlsm. ante 16 (1889).

Hab. (S. AMERICA?).

(Type & ? Vienna).

### ♂ ♀ latipes Wlk.

Tinægeria latipes Wlk. Cat. Lp. Ins. B. M. XXXI. 25 (1864);

Wlsm. ante 8 (1889).

Snellenia latipes, Wlsm. ante 16-17, Pl. vi. 5 (1889).

Hab. S. America—Para, Maranon.

(Type & B. M.)

### P bimaculata Wlsm. sp. n. ante 17, Pl. vi. 6 (1889).

Hab. Borneo-Sandakan.

(Type \ Mus. Wlsm.)

#### PSEUDÆGERIA Wlsm. g. n.

ante 17-18 (1889). Type, Ochsenheimeria? squamicornis F. & R.

#### 2 squamicornis F. & R.

Ochsenheimeria? squamicornis F. & R. Reise Novara, pl. cxxxix.

6 (1875); Wlsm. ante 18 (1889).

Pseudægeria squamicornis, Wlsm. ante 18—19, Pl. iii. (1889).

Hab. FIJI, AUSTRALIA.

(Type Q? Vienna).

#### ŒDEMATOPODA Z.

Handl. Kong. Svensk. Ak., 1852, 96; Wlsm, ante 19-20 (1889).

Type Œdematopoda princeps Z.

[= Atkinsonia Stn. Trans. Ent. Soc. (n. s.) V. 125 (1859); Wlsm. ante 9, 20 (1889). Type Atkinsonia clerodendronella Stn.]

8 Princeps Z. Handl. Kong. Svensk. Ak. 1852, 96—7; Wlk. Cat. Lp.

Ins. B. M. xxix. 707 (1864); Wlsm. Trans. Ent. Soc. 1881, 271:

ante 20-1, Pl. iv. (1889).

Hab. Africa-Natal. (Type 9 Stockholm Mus.)

<sup>\*</sup> Walker's locality "Para" is an error; the types are from Sydney, purchased from Argent.

### 3 clerodendronella Stn.

Atkinsonia clerodendronella Stn. Trans. Ent. Soc. (n. s.) V. 125—6 (1859); Wlk. Cat. Lp. Ins. B. M. XXX. 900 (1864); Moore P. Z. S. 1867, 672; Wlsm. ante 9 (1889). Edematopoda clerodendronella Wlsm. ante 21—2, Pl. vi. 7

(1889).

Larva. On tops of Clerodendron, drawing together the leaves with a web.

Imago, July.

Hab. India-Calcutta.

(Type, Mus. Stn.)

### ♂ ♀ ignipicta Btl.

Eretmocera ignipieta Btl. Trans. Ent. Soc. 1881, 593-4; Wlsm. ante 9 (1889).

Œdematopoda ignipicta Wlsm. ante 22, Pl. vi. 8 (1889).

Hab. Japan-Tokei, Yesso.

(Type, B. M.)

### d leechi Wlsm., sp. n., ante 23-4, Pl. vi. 9 (1889).

Imago, May, Hab. Japan-Satsuma. (Type & Mus. Wlsm.)

#### ERETMOCERA Z.

Handl. Kong. Svensk. Ak. 1852, 96; Wlsm. ante 24, 26 (1889).

Type Eretmocera fuscipennis, Z.

[=Staintonia Stgr. Stett. Ent. Zeit. XX. 250 (1859); Wlsm. Trans. Ent. Soc. 1881, 271: ante 9, 24-5 (1889). Type, Staintonia medinella Stgr.

Г = Exodomorpha Wlk. Cat. Lep. Ins. B. M. XXIX. 833 (1864); Wlsm. Trans. Ent. Soc. 1881, 271: ante 9, 25 (1889). Type, Exodomorpha divisella Wlk.

= Castorura Meyr. Proc. Linn. Soc. N. S. W. (2nd s.) i. 1047 (1887); WISM. ante 9, 25—6 (1889). Type, Castorura chrysias Meyr.]

#### ₹ 9 fuscipennis Z.

Hab.

Erctmocera fuscipennis (var. a) Z. Handl. Kong. Svensk. Ak. 1852, 97—8; Wlk. Cat. Lp. Ins. B. M. XXIX. 707 (1864); WISM. Trans. Ent. Soc. 1881, 271-2; ante 26-7, Pl. vi. 10 (1889).

= Eretmocera inclusella, Wlk. Cat. Lp. Ins. B. M. XXIX. 833—4 (1864); Wlsm. Trans. Ent. Soc. 1881, 271—2; ante 27-28 (1889).

 $(Type \circlearrowleft \circ P.M.)$ Africa—Limpopo-Gariep District, Port Natal, Bathurst

(Gambia).

(Type 3 2 Stockholm Mus.)

### 3 carteri Wlsm. sp. n. ante 28, Pl. vi. 11 (1889).

Hab. Africa-Bathurst (Gambia). (Type & Mus. Wlsm.)

♂ ♀ derogatella Wlk.

Exodomorpha derogatella Wlk. Cat. Lp. Ins. B. M. XXIX. 834 (1864); Wlsm. Trans. Ent. Soc. 1881, 271—2: ante 28— 29, Pl. vi. 12 (1889).

= Eretmocera fuscipennis (var. b.) Z. Handl. Kong. Svensk. Ak. 1852, 97—8; Wlsm. Trans. Ent. Soc. 1881, 271—2; ante 26—7 (1889).

(Type & Q Stockholm Mus.)

Hab. Africa—Limpopo-Gariep District, Port Natal, Zanzibar. (Type  $\mathcal{J}$  B. M.)

d dorsistrigata Wlsm. sp. n. ante 29-30, Pl. vi. 13 (1889).

Hab. Africa-Zanzibar. (Type & Mus. Wlsm.)

(9?) lunifera Z. Handl. Kong. Svensk. Ak. 1852, 100-1; Wlk. Cat. Lp. Ins. B. M. XXIX. 708 (1864); Wlsm. Trans. Ent. Soc. 1881, 272, Pl. xiii. 41: ante 30, Pl. vi. 14 (1889). Hab. Africa-Limpopo-Gariep District, Natal?. (Type (♀?), Stockholm Mus.)

♂ ♀ miniata Wlsm. sp. n. ante 30—1, Pl. vi. 15 (1889).

Hab. AFRICA-Zanzibar, Port Natal. (Type & Q Mus. Wlsm.)

3 9 scatospila Z. Handl. Kong. Svensk. Ak. 1852, 99—100; Wlk. Cat. Lp. Ins. B. M. XXIX. 708 (1864); Wlsm. Trans. Ent. Soc. 1881, 272; ante 31-2, Pl. vi. 16 (1889).

Africa—Limpopo-Gariep District, Bathurst and Accra (Gumbia).

(Type (♀?), Stockholm Mus.)

3 basistrigata Wlsm. sp. n. ante 32-33, Pl. v. (1889).

Hab. Africa-Bathurst (Gambia). (Type & Mus. Wlsm.)

♂ ♀ lætissima Z. Handl. Kong. Svensk. Ak. 1852, 100—1; Wlk. Cat. Lp. Ins. B. M. XXIX. 708 (1864); Wlsm. Trans. Ent. Soc. 1881, 272; ante 33, Pl. vi. 17 (1889).

= Exodomorpha divisella, Wlk. Cat. Lp. Ins. B. M. XXIX. 833-4 (1864); Wlsm. Trans. Ent. Soc. 1881, 272; ante 34 (1889).

Leone, Bathurst and Acera (Gambia).

(Type & Stockholm Mus.)

♂ ? impactella Wlk.

Gelechia impactella Wlk. Cat. Lp. Ins. B. M. XXIX. 637 (1864); Moore, Lp. Ceyl. III. 514 (1887); Wlsm. ante 34 (1889). Eretmocera impactella Moore Lp. Ceyl. III. 514, Pl. ecix., 10

(1887); Wlsm. ante 34—5, Pl. vi. 18 (1889).

Imago, April.

Asia-India, Dharmsala (Punjab), Barrackpore. Ceylon Singapore.

(Type & B. M.)

#### Genera connecting Tinægeria with Eretmocera. 40

उ ? chrysias Meyr.

Castorura chrysias Meyr. Proc. Lin. Soc. N. S. W. (2. s.), I. 1047—8 (1887); Wlsm. ante 9 (1889). Eretmocera chrysias Wlsm. ante 35, Pl. vi. 19 (1889). Hab. Australia—Maryborough (Qd.), Sydney (N. S. W.) (Type Q Mus. Macleay).

3 9 medinella Stgr.

Staintonia medinella Stgr., Stett. Ent. Zeit. XX. 250-1 (1859); Stgr. & Wlk. Cat. (II.) No. 2704, p. 324 (1871); Wlk. Cat. Lp. Ins. B. M. XXIX. 701 (1864); Stn. Tin. S. Eur. 142, 157, 340 (1869); Ersch. Fedtsch. Reis. in Turkst. II. 106 (1874); Chr. Hor. Soc. Ent. Ross. XII. 230 (1876); Wism. ante 9 (1889).

Eretmocera medinella Wlsm. ante 35-36, Pl. vi. 20 (1889). Imago. June, on flowers of Umbelliferæ and Senecio.

Hab. Europe—Chiclana (Andalus).

Asia—Krasnowodsk (Persia), Samarcand (Turkestan).

(Type & Q Mus. Stgr.)